

**REMARKS**

Claims 1-5, 7-16 and 18-34 are pending. Claims 1, 7-9, 14 and 16 are under consideration. Claims 2-5, 10-13, 15 and 18-34 have been withdrawn from consideration as the result of a restriction requirement.

**Response to Rejections Under 35 U.S.C. § 103(a)**

Claims 1, 9, 14 and 16 are rejected under 35 U.S.C. § 103 (a) as allegedly being obvious over Vossmeyer in view of Perez. Claims 7-8 are rejected under 35 U.S.C. § 103 as allegedly being obvious over Vossmeyer in view of Perez, and further in view of Peng.

The Examiner in the Advisory Action states that Applicants' arguments are not persuasive because Applicants have not pointed out why the molecular imprinting technique of Perez could not be performed with the nanoparticles of Vossmeyer.

The Examiner will kindly refer to Claim 1 of the invention, as follows:

A method for manufacturing a biochemical labeling material, comprising:

providing a plurality of nanoparticles;

bonding the nanoparticles to template molecules by molecular imprinting, wherein the nanoparticles are semiconductor;

polymerizing the nanoparticles to form a matrix with uniformly-distributed template molecule, wherein a functional monomer, a crosslinking agent, and an initiator are added during polymerization of nanoparticles; and

removing the template molecule from the matrix to leave a cavity with specific area serving as a detection group of the matrix.

Accordingly, the steps of Claim 1 comprise:

- (1) A step in which the nanoparticles are bonded with templates via molecular imprinting;
- (2) A step in which the results of step 1 are polymerized by functional monomer, initiator and crosslinking agent to form a matrix; and
- (3) A step in which the templates are removed to obtain a biochemical labeling material.

In Perez's paper, Perez teaches to form core-shell nanoparticles by polymerizing a "pure organic monomer" via two-stage polymerization and bonding the core-shell nanoparticles to a template and subsequently removing the templates. The Examiner states that core-shell nanoparticles disclosed by Perez can be substituted with inorganic nanoparticles disclosed by Vossmeyer.

In the present invention, it should be noted that the nanoparticles bonded with template molecules are further polymerized to form a matrix. This method step (step (2) noted above) is a distinction over the art.

In Perez's paper, the polymerization is performed in order to form core-shell nanoparticles, and the Examiner also states that the core-shell nanoparticles are substituted with inorganic nanoparticles disclosed by Vossmeyer.

Neither Vossmeyer nor Perez teaches or suggests further polymerizing the core-shell nanoparticles (or the inorganic nanoparticles) bonded with template molecules with functional monomer, initiator and crosslinking agent to form a matrix.

RESPONSE UNDER 37 C.F.R. § 1.114(c)  
U.S. Application No.: 10/600,830

Attorney Docket No.: Q76164

To establish a prima facie case of obviousness, the prior art references must teach or suggest all the claim limitations, according to MPEP 2143.

The cited references do not teach or suggest, after bonding the nanoparticles with the templates, polymerizing the nanoparticles with template molecules to form a matrix.

As discussed above, the prior art fails to disclose or render obvious the method of independent claim 1 of the invention. It is Applicant's belief that claims 7-9, 14 and 16 are allowable for at least the same reasons as claim 1.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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